0590
12/10

OIPE

(2)

P-5

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/991,225

DATE: 12/03/2001
TIME: 14:25:07

Input Set : A:\es.txt
Output Set: N:\CRF3\11212001\I991225.raw

ENTERED

```
      3 <110> APPLICANT: Bristol-Myers Squibb Company
      5 <120> TITLE OF INVENTION: A NOVEL HUMAN G-PROTEIN COUPLED RECEPTOR, HGPRBMY11,
EXPRESSED HIGHLY IN
      6       HEART AND VARIANTS THEREOF
      8 <130> FILE REFERENCE: D0075.NP
C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/991,225
C--> 10 <141> CURRENT FILING DATE: 2001-11-16
     10 <150> PRIOR APPLICATION NUMBER: 60/249,613
     11 <151> PRIOR FILING DATE: 2000-11-17
     13 <150> PRIOR APPLICATION NUMBER: 60/257,611
     14 <151> PRIOR FILING DATE: 2000-12-21
     16 <150> PRIOR APPLICATION NUMBER: 60/305,818
     17 <151> PRIOR FILING DATE: 2001-07-16
     19 <160> NUMBER OF SEQ ID NOS: 81
     21 <170> SOFTWARE: PatentIn version 3.0
     23 <210> SEQ ID NO: 1
     24 <211> LENGTH: 1708
     25 <212> TYPE: DNA
     26 <213> ORGANISM: homo sapiens
     28 <220> FEATURE:
     29 <221> NAME/KEY: CDS
     30 <222> LOCATION: (515)..(1504)
     32 <400> SEQUENCE: 1
     33 cccacgcgtc cggggagctt gcactaacat ctacaatggc ttctaaaaag cacagatgac     60
     35 ctgctacact tcctgacttg cttgctattg gttggcactg ttcataaata taatttgctc    120
     37 tttcactttt ctttgaaatg agcaacctga attactcgga ggagaaaggc aggagagata    180
     39 gaggcagcag aagccagggc agctgaaaga cagagacctt cagtctgaac caacaacaag    240
     41 caaagttaaa ttatggatat ccaagggagt ctatagaagg tccatgcaag acattttgac    300
     43 tacttgtctg aactagatat cccttgaatg tgcacacaaa aagtgaatgg gtcatttgat    360
     45 aagggaaaac taggttccaa gatggctgaa taggaagagc tccagtctgc agatcccagt    420
     47 gtgagcaacg tggaagatgg gtgatttctg catttccaac tgagcatgga gagaaaaatt    480
     49 tatgtccttg caaccatcca tctccgtatc agaa atg gaa cca aat ggc acc ttc    535
     50                                    Met Glu Pro Asn Gly Thr Phe
     51                                    1               5
     53 agc aat aac aac agc agg aac tgc aca att gaa aac ttc aag aga gaa      583
     54 Ser Asn Asn Asn Ser Arg Asn Cys Thr Ile Glu Asn Phe Lys Arg Glu
     55         10                  15                  20
     57 ttt ttc cca att gta tat ctg ata ata ttt ttc tgg gga gtc ttg gga      631
     58 Phe Phe Pro Ile Val Tyr Leu Ile Ile Phe Phe Trp Gly Val Leu Gly
     59     25                  30                  35
     61 aat ggg ttg tcc ata tat gtt ttc ctg cag cct tat aag aag tcc aca      679
     62 Asn Gly Leu Ser Ile Tyr Val Phe Leu Gln Pro Tyr Lys Lys Ser Thr
     63 40                  45                  50                  55
     65 tct gtg aac gtt ttc atg cta aat ctg gcc att tca gat ctc ctg ttc      727
     66 Ser Val Asn Val Phe Met Leu Asn Leu Ala Ile Ser Asp Leu Leu Phe
     67                 60                  65                  70
     69 ata agc acg ctt ccc ttc agg gct gac tat tat ctt aga ggc tcc aat      775
     70 Ile Ser Thr Leu Pro Phe Arg Ala Asp Tyr Tyr Leu Arg Gly Ser Asn
```

RAW SEQUENCE LISTING DATE: 12/03/2001
PATENT APPLICATION: US/09/991,225 TIME: 14:25:07

Input Set : A:\es.txt
Output Set: N:\CRF3\11212001\I991225.raw

```
71              75                  80                  85
73 tgg ata ttt gga gac ctg gcc tgc agg att atg tct tat tcc ttg tat      823
74 Trp Ile Phe Gly Asp Leu Ala Cys Arg Ile Met Ser Tyr Ser Leu Tyr
75          90                  95                  100
77 gtc aac atg tac agc agt att tat ttc ctg acc gtg ctg agt gtt gtg      871
78 Val Asn Met Tyr Ser Ser Ile Tyr Phe Leu Thr Val Leu Ser Val Val
79      105                 110                 115
81 cgt ttc ctg gca atg gtt cac ccc ttt cgg ctt ctg cat gtc acc agc      919
82 Arg Phe Leu Ala Met Val His Pro Phe Arg Leu Leu His Val Thr Ser
83 120                 125                 130                 135
85 atc agg agt gcc tgg atc ctc tgt ggg atc ata tgg atc ctt atc atg      967
86 Ile Arg Ser Ala Trp Ile Leu Cys Gly Ile Ile Trp Ile Leu Ile Met
87                  140                 145                 150
89 gct tcc tca ata atg ctc ctg gac agt ggc tct gag cag aac ggc agt     1015
90 Ala Ser Ser Ile Met Leu Leu Asp Ser Gly Ser Glu Gln Asn Gly Ser
91              155                 160                 165
93 gtc aca tca tgc tta gag ctg aat ctc tat aaa att gct aag ctg cag     1063
94 Val Thr Ser Cys Leu Glu Leu Asn Leu Tyr Lys Ile Ala Lys Leu Gln
95          170                 175                 180
97 acc atg aac tat att gcc ttg gtg gtg ggc tgc ctg ctg cca ttt ttc     1111
98 Thr Met Asn Tyr Ile Ala Leu Val Val Gly Cys Leu Leu Pro Phe Phe
99      185                 190                 195
101 aca ctc agc atc tgt tat ctg ctg atc att cgg gtt ctg tta aaa gtg     1159
102 Thr Leu Ser Ile Cys Tyr Leu Leu Ile Ile Arg Val Leu Leu Lys Val
103 200                 205                 210                 215
105 gag gtc cca gaa tcg ggg ctg cgg gtt tct cac agg aag gca ctg acc     1207
106 Glu Val Pro Glu Ser Gly Leu Arg Val Ser His Arg Lys Ala Leu Thr
107                 220                 225                 230
109 acc atc atc atc acc ttg atc atc ttc ttc ttg tgt ttc ctg ccc tat     1255
110 Thr Ile Ile Ile Thr Leu Ile Ile Phe Phe Leu Cys Phe Leu Pro Tyr
111             235                 240                 245
113 cac aca ctg agg acc gtc cac ttg acg aca tgg aaa gtg ggt tta tgc     1303
114 His Thr Leu Arg Thr Val His Leu Thr Thr Trp Lys Val Gly Leu Cys
115         250                 255                 260
117 aaa gac aga ctg cat aaa gct ttg gtt atc aca ctg gcc ttg gca gca     1351
118 Lys Asp Arg Leu His Lys Ala Leu Val Ile Thr Leu Ala Leu Ala Ala
119     265                 270                 275
121 gcc aat gcc tgc ttc aat cct ctg ctc tat tac ttt gct ggg gag aat     1399
122 Ala Asn Ala Cys Phe Asn Pro Leu Leu Tyr Tyr Phe Ala Gly Glu Asn
123 280                 285                 290                 295
125 ttt aag gac aga cta aag tct gca ctc aga aaa ggc cat cca cag aag     1447
126 Phe Lys Asp Arg Leu Lys Ser Ala Leu Arg Lys Gly His Pro Gln Lys
127                 300                 305                 310
129 gca aag aca aag tgt gtt ttc cct gtt agt gtg tgg ttg aga aag gaa     1495
130 Ala Lys Thr Lys Cys Val Phe Pro Val Ser Val Trp Leu Arg Lys Glu
131             315                 320                 325
133 aca aga gta taaggagctc ttagatgaga cctgttcttg tatccttgtg            1544
134 Thr Arg Val
135         330
```

RAW SEQUENCE LISTING DATE: 12/03/2001
PATENT APPLICATION: US/09/991,225 TIME: 14:25:07

Input Set : A:\es.txt
Output Set: N:\CRF3\11212001\I991225.raw

tccatcttca ttcactcata gtctccaaat gactttgtat ttacatcact cccaacaaat 1604
gttgattctt aatatttagt tgaccattac ttttgttaat aagacctact tcaaaaattt 1664
tattcagtgt aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1708

<210> SEQ ID NO: 2
<211> LENGTH: 330
<212> TYPE: PRT
<213> ORGANISM: homo sapiens
<400> SEQUENCE: 2

Met	Glu	Pro	Asn	Gly	Thr	Phe	Ser	Asn	Asn	Ser	Arg	Asn	Cys	Thr	
1			5					10					15		
Ile	Glu	Asn	Phe	Lys	Arg	Glu	Phe	Phe	Pro	Ile	Val	Tyr	Leu	Ile	Ile
		20					25					30			
Phe	Phe	Trp	Gly	Val	Leu	Gly	Asn	Gly	Leu	Ser	Ile	Tyr	Val	Phe	Leu
	35					40					45				
Gln	Pro	Tyr	Lys	Lys	Ser	Thr	Ser	Val	Asn	Val	Phe	Met	Leu	Asn	Leu
50					55					60					
Ala	Ile	Ser	Asp	Leu	Leu	Phe	Ile	Ser	Thr	Leu	Pro	Phe	Arg	Ala	Asp
65				70					75					80	
Tyr	Tyr	Leu	Arg	Gly	Ser	Asn	Trp	Ile	Phe	Gly	Asp	Leu	Ala	Cys	Arg
			85					90					95		
Ile	Met	Ser	Tyr	Ser	Leu	Tyr	Val	Asn	Met	Tyr	Ser	Ser	Ile	Tyr	Phe
		100					105					110			
Leu	Thr	Val	Leu	Ser	Val	Val	Arg	Phe	Leu	Ala	Met	Val	His	Pro	Phe
	115					120					125				
Arg	Leu	Leu	His	Val	Thr	Ser	Ile	Arg	Ser	Ala	Trp	Ile	Leu	Cys	Gly
130					135					140					
Ile	Ile	Trp	Ile	Leu	Ile	Met	Ala	Ser	Ser	Ile	Met	Leu	Leu	Asp	Ser
145				150					155					160	
Gly	Ser	Glu	Gln	Asn	Gly	Ser	Val	Thr	Ser	Cys	Leu	Glu	Leu	Asn	Leu
			165					170					175		
Tyr	Lys	Ile	Ala	Lys	Leu	Gln	Thr	Met	Asn	Tyr	Ile	Ala	Leu	Val	Val
		180					185					190			
Gly	Cys	Leu	Leu	Pro	Phe	Phe	Thr	Leu	Ser	Ile	Cys	Tyr	Leu	Leu	Ile
	195					200					205				
Ile	Arg	Val	Leu	Leu	Lys	Val	Glu	Val	Pro	Glu	Ser	Gly	Leu	Arg	Val
210					215					220					
Ser	His	Arg	Lys	Ala	Leu	Thr	Thr	Ile	Ile	Ile	Thr	Leu	Ile	Ile	Phe
225				230					235					240	
Phe	Leu	Cys	Phe	Leu	Pro	Tyr	His	Thr	Leu	Arg	Thr	Val	His	Leu	Thr
			245					250					255		
Thr	Trp	Lys	Val	Gly	Leu	Cys	Lys	Asp	Arg	Leu	His	Lys	Ala	Leu	Val
		260					265					270			
Ile	Thr	Leu	Ala	Leu	Ala	Ala	Ala	Asn	Ala	Cys	Phe	Asn	Pro	Leu	Leu
	275					280					285				
Tyr	Tyr	Phe	Ala	Gly	Glu	Asn	Phe	Lys	Asp	Arg	Leu	Lys	Ser	Ala	Leu
290					295					300					
Arg	Lys	Gly	His	Pro	Gln	Lys	Ala	Lys	Thr	Lys	Cys	Val	Phe	Pro	Val
305				310					315					320	
Ser	Val	Trp	Leu	Arg	Lys	Glu	Thr	Arg	Val						

RAW SEQUENCE LISTING DATE: 12/03/2001
PATENT APPLICATION: US/09/991,225 TIME: 14:25:07

Input Set : A:\es.txt
Output Set: N:\CRF3\11212001\I991225.raw

```
232                 325                 330
235 <210> SEQ ID NO: 3
236 <211> LENGTH: 362
237 <212> TYPE: PRT
238 <213> ORGANISM: homo sapiens
240 <400> SEQUENCE: 3
242 Met Thr Glu Ala Leu Ile Ser Ala Ala Leu Asn Gly Thr Gln Pro Glu
243 1               5                  10                  15
245 Leu Leu Ala Gly Gly Trp Ala Ala Gly Asn Ala Thr Thr Lys Cys Ser
246             20                  25                  30
248 Leu Thr Lys Thr Gly Phe Gln Phe Tyr Tyr Leu Pro Thr Val Tyr Ile
249         35                  40                  45
251 Leu Val Phe Ile Thr Gly Phe Leu Gly Asn Ser Val Ala Ile Trp Met
252     50                  55                  60
254 Phe Val Phe His Met Arg Pro Trp Ser Gly Ile Ser Val Tyr Met Phe
255 65                  70                  75                  80
257 Asn Leu Ala Leu Ala Asp Phe Leu Tyr Val Leu Thr Leu Pro Ala Leu
258                 85                  90                  95
260 Ile Phe Tyr Tyr Phe Asn Lys Thr Asp Trp Ile Phe Gly Asp Val Met
261             100                 105                 110
263 Cys Lys Leu Gln Arg Phe Ile Phe His Val Asn Leu Tyr Gly Ser Ile
264         115                 120                 125
266 Leu Phe Leu Thr Cys Ile Ser Val His Arg Tyr Thr Gly Val Val His
267     130                 135                 140
269 Pro Leu Lys Ser Leu Gly Arg Leu Lys Lys Lys Asn Ala Val Tyr Val
270 145                 150                 155                 160
272 Ser Ser Leu Val Trp Ala Leu Val Val Ala Val Ile Ala Pro Ile Leu
273                 165                 170                 175
275 Phe Tyr Ser Gly Thr Gly Val Arg Arg Asn Lys Thr Ile Thr Cys Tyr
276             180                 185                 190
278 Asp Thr Thr Ala Asp Glu Tyr Leu Arg Ser Tyr Phe Val Tyr Ser Met
279         195                 200                 205
281 Cys Thr Thr Val Phe Met Phe Cys Ile Pro Phe Ile Val Ile Leu Gly
282     210                 215                 220
284 Cys Tyr Gly Leu Ile Val Lys Ala Leu Ile Tyr Lys Asp Leu Asp Asn
285 225                 230                 235                 240
287 Ser Pro Leu Arg Arg Lys Ser Ile Tyr Leu Val Ile Ile Val Leu Thr
288                 245                 250                 255
290 Val Phe Ala Val Ser Tyr Leu Pro Phe His Val Met Lys Thr Leu Asn
291             260                 265                 270
293 Leu Arg Ala Arg Leu Asp Phe Gln Thr Pro Gln Met Cys Ala Phe Asn
294         275                 280                 285
296 Asp Lys Val Tyr Ala Thr Tyr Gln Val Thr Arg Gly Leu Ala Ser Leu
297     290                 295                 300
299 Asn Ser Cys Val Asp Pro Ile Leu Tyr Phe Leu Ala Gly Asp Thr Phe
300 305                 310                 315                 320
302 Arg Arg Arg Leu Ser Arg Ala Thr Arg Lys Ser Ser Arg Arg Ser Glu
303                 325                 330                 335
305 Pro Asn Val Gln Ser Lys Ser Glu Glu Met Thr Leu Asn Ile Leu Thr
```

RAW SEQUENCE LISTING DATE: 12/03/2001
PATENT APPLICATION: US/09/991,225 TIME: 14:25:07

Input Set : A:\es.txt
Output Set: N:\CRF3\11212001\I991225.raw

```
306             340                 345                 350
308 Glu Tyr Lys Gln Asn Gly Asp Thr Ser Leu
309         355                 360
311 <210> SEQ ID NO: 4
312 <211> LENGTH: 362
313 <212> TYPE: PRT
314 <213> ORGANISM: homo sapiens
316 <400> SEQUENCE: 4
318 Met Thr Glu Ala Leu Ile Ser Ala Ala Leu Asn Gly Thr Gln Pro Glu
319 1               5                   10                  15
321 Leu Leu Ala Gly Gly Trp Ala Ala Gly Asn Ala Ser Thr Lys Cys Ser
322             20                  25                  30
324 Leu Thr Lys Thr Gly Phe Gln Phe Tyr Tyr Leu Pro Thr Val Tyr Ile
325         35                  40                  45
327 Leu Val Phe Ile Thr Gly Phe Leu Gly Asn Ser Val Ala Ile Trp Met
328     50                  55                  60
330 Phe Val Phe His Met Arg Pro Trp Ser Gly Ile Ser Val Tyr Met Phe
331 65                  70                  75                  80
333 Asn Leu Ala Leu Ala Asp Phe Leu Tyr Val Leu Thr Leu Pro Ala Leu
334                 85                  90                  95
336 Ile Phe Tyr Tyr Phe Asn Lys Thr Asp Trp Ile Phe Gly Asp Val Met
337             100                 105                 110
339 Cys Lys Leu Gln Arg Phe Ile Phe His Val Asn Leu Tyr Gly Ser Ile
340         115                 120                 125
342 Leu Phe Leu Thr Cys Ile Ser Val His Arg Tyr Thr Gly Val Val His
343     130                 135                 140
345 Pro Leu Lys Ser Leu Gly Arg Leu Lys Lys Lys Asn Ala Val Tyr Val
346 145                 150                 155                 160
348 Ser Ser Leu Val Trp Ala Leu Val Val Ala Val Ile Ala Pro Ile Leu
349                 165                 170                 175
351 Phe Tyr Ser Gly Thr Gly Val Arg Arg Asn Lys Thr Ile Thr Cys Tyr
352             180                 185                 190
354 Asp Thr Thr Ala Asp Glu Tyr Leu Arg Ser Tyr Phe Val Tyr Ser Met
355         195                 200                 205
357 Cys Thr Thr Val Phe Met Phe Cys Ile Pro Phe Ile Val Ile Leu Gly
358     210                 215                 220
360 Cys Tyr Gly Leu Ile Val Lys Ala Leu Ile Tyr Lys Asp Leu Asp Asn
361 225                 230                 235                 240
363 Ser Pro Leu Arg Arg Lys Ser Ile Tyr Leu Val Ile Ile Val Leu Thr
364                 245                 250                 255
366 Val Phe Ala Val Ser Tyr Leu Pro Phe His Val Met Lys Thr Leu Asn
367             260                 265                 270
369 Leu Arg Ala Arg Leu Asp Phe Gln Thr Pro Gln Met Cys Ala Phe Asn
370         275                 280                 285
372 Asp Lys Val Tyr Ala Thr Tyr Gln Val Thr Arg Gly Leu Ala Ser Leu
373     290                 295                 300
375 Asn Ser Cys Val Asp Pro Ile Leu Tyr Phe Leu Ala Gly Asp Thr Phe
376 305                 310                 315                 320
378 Arg Arg Arg Leu Ser Arg Ala Thr Arg Lys Ser Ser Arg Arg Ser Glu
```

Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY DATE: 12/03/2001
PATENT APPLICATION: **US/09/991,225** TIME: 14:25:08

Input Set : **A:\es.txt**
Output Set: **N:\CRF3\11212001\I991225.raw**

L:10 M:270 C: Current Application Number differs, Replaced Current Application No
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:1794 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:80
L:1812 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:80
L:1814 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:80
L:1820 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:81
L:1838 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:81
L:1840 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:81